

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A monitor system that monitors a projection apparatus having projection section for projecting an image,

wherein an actual projected image projected by said projection section is loaded into said projection section so that an error in said projection section can be detected on the basis of the loaded actual projected image.

2. (Original) A monitor system that monitors a projection apparatus having projection section for projecting an image, the system comprising image loading section for loading an actual projected image projected by said projection section, error detection section for detecting errors in said projection section on the basis of the actual projected image loaded into said image loading section, and error notification section for carrying out a predetermined notification when said error detection section detects an error, and

wherein said error detection section detects errors in said projection section on the basis of an original projected image to be projected by said projection section and the actual projected image loaded into said image loading section.

3. (Original) The monitor system for a projection apparatus according to claim 2, wherein a monitor center that monitors said projection apparatus and said projection apparatus are connected together so as to communicate with each other,

in addition to said projection section, said projection apparatus has said image loading section, said error detection section, and said error notification section, and

when said error detection section detects an error, said error notification section carries out predetermined notification to notify said monitor center of the error.

4. (Currently Amended) The monitor system for a projection apparatus according to claim ~~2 or 3~~, wherein said image loading section is a one-dimensional line sensor.

5. (Original) The monitor system for a projection apparatus according to claim 4, wherein said one-dimensional line sensor is adapted to obtain a horizontal line image from said actual projected image.

6. (Currently Amended) The monitor system for a projection apparatus according to claim ~~2 or 3~~, wherein said image loading section is a two-dimensional area sensor.

7. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 2 to 6~~ claim 2, wherein said predetermined notification includes error information on an error in said projection section and an event log for said projection apparatus.

8. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 2 to 7~~ claim 2, wherein said error detection section compares said original projected image with said actual projected image to detect an error in said projection section on the basis of a match or difference between the original projected image and the actual projected image.

9. (Original) The monitor system for a projection apparatus according to claim 8, wherein said original projected image comprises original projected images in a plurality of different colors,

said actual projected image is obtained by synthesizing actual projected images in said plurality of colors projected on the basis of said original projected images in said plurality of colors,

said image loading section is monochrome sensors provided in association with said actual projected images in said plurality of colors so that said actual projected images in said plurality of colors can be loaded into the respective monochrome sensors, and

said error detection section compares, for corresponding projected images in each color, said original projected image with an actual projected image projected on the basis of the original projected image and then loaded into a corresponding one of said monochrome sensors at the same or at almost the same time as when the actual projected image is projected, to detect a difference between the original projected image and the actual projected image to detect an error in said projection section on the basis of the detected difference.

10. (Original) The monitor system for a projection apparatus according to claim 8, wherein said original projected image comprises original projected images in a plurality of different colors,

said actual projected image is obtained by synthesizing actual projected images in said plurality of colors projected on the basis of said original projected images in said plurality of colors,

said image loading section is monochrome sensors provided in association with said actual projected images in said plurality of colors so that said actual projected images in said plurality of colors can be loaded into the respective monochrome sensors, and

said error detection section compares, for corresponding projected images in each color, a projected image signal inputted to said projection section and which can construct said original projected images with a loaded image signal outputted by a corresponding one of said monochrome sensors and which can construct an actual projected image projected on the basis of the original projected image and then loaded into said monochrome sensor at the same or almost the same time as when the actual projected image is projected, to detect a difference between the original projected image and the actual projected image to detect an error in said projection section on the basis of the detected difference.

11. (Currently Amended) The monitor system for a projection apparatus according to ~~either claim 9 or 10~~, wherein said projection section includes image display section for displaying an image on the basis of the projected image signal or projected image information and a light source that irradiates the image displayed by said image display section with light to project the image on a screen, and

said error detection section determines that an error is occurring in said light source when a predetermined threshold is exceeded for said corresponding projected images in one of the plurality of colors.

12. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 2 to 11~~ claim 2, wherein said error detection section calculates a difference between a pixel value for a predetermined position in said actual projected image and a pixel value for a position adjacent to said predetermined position in said actual projected image, to determine that an error is occurring in said projection section when the calculated difference exceeds a predetermined threshold.

13. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 2 to 12~~ claim 2, wherein said error detection section calculates a difference between a pixel value for a predetermined position in said actual projected image and a pixel value for a position separate from said predetermined position in said actual projected image, to determine that an error is occurring in said projection section when the calculated difference exceeds a predetermined threshold.

14. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 2 to 13~~ claim 2, wherein for each of a plurality of detected positions in said actual projected image, said error detection section calculates a difference between a pixel value for the detected position in said actual projected image and a pixel value for a position adjacent to said detected position in said actual projected image, to determine that an error is occurring in said projection section when the sum of calculated differences exceeds a predetermined threshold.

15. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 12 to 14~~ claim 12, wherein said pixel value is obtained by sampling the value for the pixel at the same position N (N is an integer equal to or larger than 1) times from a reference time t at predetermined intervals Δt and adding the sampled pixel values together.

16. (Currently Amended) The monitor system for a projection apparatus according to ~~any of claims 2 to 15~~ claim 2, wherein the same timing signal is inputted to said projection section and said image loading section, and a projection timing for said projection section is synchronized with a loading timing for said image loading section on the basis of said timing signal.

17. (Original) A projection apparatus comprising projection section for projecting an image, image loading section for loading the actual projected image projected by said projection section, error detection section for detecting errors in said projection section on the basis of the actual projected image loaded into said image loading section, and error notification section for carrying out a predetermined notification when said error detection section detects an error, and

wherein said error detection section detects errors in said projection section on the basis of an original projected image to be projected by said projection section and the actual projected image loaded into said image loading section.

18. (Original) The projection apparatus according to claim 17, which is connected to a monitor center so as to communicate with the monitor center, and

wherein when said error detection section detects an error, said error notification section carries out a predetermined notification to notify said monitor center that the error is detected.

19. (Original) A projection apparatus connected to a monitor center so as to communicate with the monitor center, the apparatus comprising projection section for projecting an image, image loading section for loading the actual projected image projected by said projection section, error detection section for detecting errors in said projection section on the basis of the actual projected image loaded into said image loading section, and detection result providing section for providing an error detection result obtained by said error detection section in response to an access from said monitor center, and

wherein said error detection section detects errors in said projection section on the basis of an original projected image to be projected by said projection section and an actual projected image loaded into said image loading section, and

said detection result providing section saves the error detection result obtained by said error detection section and provides said saved error detection result to said monitor center when said monitor center accesses said projection apparatus.

20. (Currently Amended) The projection apparatus according to ~~any of claims 17 to 19~~ claim 17, wherein said image loading section is a one-dimensional line sensor.

21. (Original) The projection apparatus according to claim 20, wherein said one-dimensional line sensor is adapted to load a horizontal line image from said actual projected image.

22. (Currently Amended) The projection apparatus according to ~~any of claims 17 to 19~~ claim 17, wherein said image loading section is a two-dimensional area sensor.

23. (Currently Amended) The projection apparatus according to ~~any of claims 17 to 22~~ claim 17, wherein said error detection section compares said original projected image with said actual projected image to detect an error in said projection section on the basis of a match or difference between the original projected image and the actual projected image.

24. (Original) A monitor program for a projection apparatus, the program monitoring a projection apparatus having projection section for projecting an image, the program comprising:

allowing a computer to execute a process of loading an actual projected image projected by said projection section and detecting an error in said projection section on the basis of the loaded actual projected image.

25. (Original) A monitor program for a projection apparatus, the program being executed by a projection apparatus having projection section for projecting an image and comprising a computer, the program comprising:

allowing execution of a process implemented as image loading section for loading the actual projected image projected by said projection section, error detection section for detecting errors in said projection section on the basis of the actual projected image loaded into said image loading section, and error notification section for carrying out a predetermined notification when said error detection section detects an error, and

wherein said error detection section detects errors in said projection section on the basis of an original projected image to be projected by said projection section and the actual projected image loaded into said image loading section.

26. (Original) A monitor program for a projection apparatus, the program being executed by a projection apparatus connected to a monitor center so as to communicate with the monitor center, having projection section for projecting an image, and comprising a computer, the program comprising:

allowing execution of a process implemented as image loading section for loading the actual projected image projected by said projection section, error detection section for detecting errors in said projection section on the basis of the actual projected image loaded into said image loading section, and detection result providing section for providing an error

detection result obtained by said error detection section in response to an access from said monitor center, and

wherein said error detection section detects errors in said projection section on the basis of an original projected image to be projected by said projection section and an actual projected image loaded into said image loading section, and

said detection result providing section saves the error detection result obtained by said error detection section and provides said saved error detection result to said monitor center when said monitor center accesses said projection apparatus.

27. (Original) A monitor method for a projection apparatus, the method monitoring a projection apparatus having projection section for projecting an image, the method comprising:

loading an actual projected image projected by said projection section and detecting an error in said projection section on the basis of the loaded actual projected image.

28. (Currently Amended) A monitor method for a projection apparatus, the method monitoring a projection apparatus having a projection section for projecting an image, the method comprising:

~~an image loading step of loading the actual projected image projected by said projection section, an error detection step of detecting an error in said projection section on the basis of the loaded actual projected image loaded in said image loading step, and an error notification step of carrying out a predetermined notification when an error is detected in said error detection step, and~~

wherein said error detection-~~step~~ detects an error in said projection section on the basis of an original projected image to be projected by said projection section and the actual projected image that was loaded-in-said-image-loading-~~step~~.

29. (Currently Amended) A monitor method for a projection apparatus, the method monitoring a projection apparatus connected to a monitor center so as to communicate with the monitor center and having a projection section for projecting an image, the method comprising:

~~an image-loading-step~~ of loading the actual projected image projected by said projection section, ~~an error detection-step~~ of detecting an error in said projection section on the basis of the actual projected image that was loaded-in-said-image-loading-~~step~~, and a ~~detection-result providing-step~~ of providing an error detection result obtained in-by said error detection step in response to an access from said monitor center, and

wherein said error detection-~~step~~ detects an error in said projection section on the basis of an original projected image to be projected by said projection section and an actual projected image that was loaded-in-said-image-loading-~~step~~, and

~~said detection-result providing-step~~ ~~saves~~ the error detection result obtained in-by said error detection ~~step~~ is saved and provides-provided ~~said saved-error-detection-result~~ to said monitor center when said monitor center accesses said projection apparatus.

30. (New) The monitor system for a projection apparatus according to claim 13, wherein said pixel value is obtained by sampling the value for the pixel at the same position N (N is an integer equal to or larger than 1) times from a reference time t at predetermined intervals Δt and adding the sampled pixel values together.

31. (New) The monitor system for a projection apparatus according to claim 14, wherein said pixel value is obtained by sampling the value for the pixel at the same position N (N is an integer equal to or larger than 1) times from a reference time t at predetermined intervals Δt and adding the sampled pixel values together.